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## PATENT ABSTRACTS OF JAPAN

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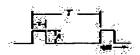
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## (54) PULSE SIGNAL TRANSMISSION SYSTEM

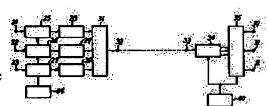
## (57) Abstract:

PURPOSE: To transmit a fast-speed signal by using a filter narrow in band width by passing plural pulse trains successively shifted in phase through BPFs which have such band widths that passes only two adjacent higher harmonics derived by Fourier series expansion in pulse waveforms.

CONSTITUTION: Data having the same waveform of τ-second width are inputted to input terminals 21 23 at intervals of T seconds and inputted to pulse signal rearranging circuits 25 27. The circuits 25 27 rearrange successively the input signals by shifting in phase by 120° under the control of a rearrangement control circuit 24, and the BPFs 28 29 extract desired higher harmonics. The BPFs 28 30 have the band widths (a) and (b) for passing only at least two adjacent higher hamonics derived by Fourier series expansion representing the input pulse waveform. The output of the BPFs 28 and 29 are put together by a synthesizer 31 to obtain an eight-phase modulated wave. A reception side detects the phase shifted point of each train by a phase demodulator 34 and performs the pulse- phase adjustment and logical processing of each train by a logical circuit 35 to output three original pulse signal trains.







## LEGAL STATUS

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